Oillube Air Compressor with Single-Stage Pump

(66-750)



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SAFETY GUIDELINES - DEFINITIONS

This manual contains information that is important for you to know and understand. This information relates to protecting **YOUR SAFETY** and **PREVENTING EQUIPMENT PROBLEMS**. To help you recognize this information, we use the symbols below. Please read the manual and pay attention to these symbols.

ADANGER Indicates an imminently hazardous situation which, if not avoided, <u>will</u> result in <u>death or serious injury</u> .	A CAUTION Indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury.
AWARNING Indicates a potentially hazardous situation which, if not avoided, <u>could</u> result in <u>death or</u> <u>serious injury.</u>	CAUTION Used without the safety alert symbol indicates a potentially hazardous situation which, if not avoided, may result in property damage .

IMPORTANT SAFETY INSTRUCTIONS

AWARNING Some dust created by power sanding, sawing, grinding, drilling, and other construction activities contains chemicals known (to the State of California) to cause cancer, birth defects or other reproductive harm. Some example of these chemicals are:

- lead from lead-based paints
- crystalline silica from bricks and cement and other masonry products
- arsenic and chromium from chemically-treated lumber

Your risk from these exposures varies, depending on how often you do this type of work. To reduce your exposure to these chemicals: work in a well ventilated area, and work with approved safety equipment, always wear **MSHA/NIOSH** approved, properly fitting face mask or respirator when using such tools.

When using air tools, basic safety precautions should always be followed to reduce the risk of of personal injury.

IMPORTANT SAFETY INSTRUCTIONS



Save these instructions



Improper operation or maintenance of this product could result in serious injury and property damage. Read and understand all warnings and operation instructions before using this equipment.

HAZARD

WARNING: Risk of explosion or fire



What Could Happen	How To Prevent It	
It is normal for electrical contacts within the motor and pressure switch to spark.	Always operate the compressor in a well ventilated area free of combustible materials, gasoline, or solvent vapors.	
If electrical sparks from compressor come into contact with flammable vapors, they may ignite, causing fire or explosion.	If spraying flammable materials, locate compressor at least 20 feet away from spray area. An additional length of hose may be required. Store flammable materials in a secure location away from compressor.	
Restricting any of the compressor ventilation openings will cause serious overheating and could cause fire.	Never place objects against or on top of compressor. Operate compressor in an open area at least 12 inches away from any wall or obstruction that would restrict the flow of fresh air to the ventilation openings. Operate compressor in a clean, dry well ventilated area. Do not operate unit indoors or in any confined area.	
Unattended operation of this product could result in personal injury or property damage. To reduce the risk of fire, do not allow the compressor to operate unattended.	Always remain in attendance with the product when it is operating. Always disconnect electrical power by moving pressure switch lever to the off position and drain tank daily or after each use.	

WARNING: Risk of Bursting



<u>Air Tank:</u> The following conditions could lead to a weakening of the tank, and result in a violent tank explosion and could cause property damage or serious injury.

	What Could Happen	How To Prevent It
1.	Failure to properly drain condensed water from tank, causing rust and thinning of the steel tank.	Drain tank daily or after each use. If tank develops a leak, replace it immediately with a new tank or replace the entire compressor.
2. 3.	Modifications or attempted repairs to the tank. Unauthorized modifications to the unloader valve, safety valve, or any other components which control tank pressure.	Never drill into, weld, or make any modifications to the tank or its attachments.
4.	Excessive vibration can weaken the air tank and cause rupture or explosion	The tank is designed to withstand specific operating pressures. Never make adjustments or parts substitutions to alter the factory set operating pressures.
ATTACHMENTS & ACCESSORIES: Exceeding the pressure rating of air tools, spray guns, air operated accessories, tires, and other inflatables can cause them to explode or fly apart, and could result in serious injury.		For essential control of air pressure, you must install a pressure regulator and pressure gauge to the air outlet (if not equipped) of your compressor. Follow the equipment manufacturers recommendation and never exceed the maximum allowable pressure rating of attachments. Never use compressor to inflate small low pressure objects such as children's toys, footballs, basketballs, etc.

HAZARD

WARNING: Risk from Flying Objects



WHAT CAN HAPPEN	HOW TO PREVENT IT
The compressed air stream can cause soft tissue damage to exposed skin and can propel dirt, chips, loose particles , and small objects at high speed , resulting in property damage or personal injury.	Always wear ANSI Z87.1 approved safety glasses with side shields when using the compressor. Never point any nozzle or sprayer toward any part of the body or at other people or animals.
	Always turn the compressor off and bleed pressure from the air hose and tank before attempting maintenance, attaching tools or accessories.

WARNING: Risk of Electrical Shock



WHAT CAN HAPPEN	HOW TO PREVENT IT	
Your air compressor is powered by	Never operate the compressor outdoors	
electricity. Like any other electrically	when it is raining or in wet conditions.	
powered device, If it is not used properly	Never operate compressor with	
it may cause electric shock.	protective covers removed or damaged.	
Repairs attempted by unqualified personnel can result in serious injury or death by electrocution.	Any electrical wiring or repairs required on this product should be performed by authorized service center personnel in accordance with national and local electrical codes.	
Electrical Grounding: Failure to provide	Make certain that the electrical circuit	
adequate grounding to this product	to which the compressor is connected	
could result in serious injury or death	provides proper electrical grounding,	
from electrocution.	correct voltage and adequate fuse	
See grounding instructions.	protection.	

HAZARD

WARNING: Risk to Breathing



WHAT CAN HAPPEN	HOW TO PREVENT IT
The compressed air directly from your compressor is not safe for breathing. The air stream may contain carbon monoxide, toxic vapors, or solid particles from the tank. Breathing these contaminants can cause serious injury or death.	Air obtained directly from the compressor should never be used to supply air for human consumption. In order to use air produced by this compressor for breathing, suitable filters and in-line safety equipment must be properly installed. In-line filters and safety equipment used in conjunction with the compressor must be capable of treating air to all applicable local and federal codes prior to human consumption.
Sprayed materials such as paint, paint solvents, paint remover, insecticides, weed killers, may contain harmful vapors and poisons.	Work in an area with good cross ventilation. Read and follow the safety instructions provided on the label or safety data sheets for the materials you are spraying. Use a NIOSH/ MSHA approved respirator designed for use with your specific application.

WARNING: RISK OF BURNS



WHAT CAN HAPPEN	HOW TO PREVENT IT
Touching exposed metal such as the compressor head or outlet tubes, can result in serious burns.	Never touch any exposed metal parts on compressor during or immediately after operation. Compressor will remain hot for several minutes after operation. Do not reach around protective shrouds or attempt maintenance until unit has been allowed to cool.

HAZARD

WARNING: RISK FROM MOVING PARTS



WHAT CAN HAPPEN	HOW TO PREVENT IT	
Moving parts such as the pulley, flywheel, and belt can cause serious injury if they com into contact with you or your clothing.	Never operate the compressor with guards or covers which are damaged or removed.	
Attempting to operate compressor with damaged or missing parts or attempting to repair compressor with protective shrouds removed can expose you to moving parts and can result in serious injury.	Any repairs required on this product should be performed by authorized service center personnel.	

HAZARD

WARNING: RISK OF FALLING



WHAT CAN HAPPEN	HOW TO PREVENT IT
A portable compressor can fall from a table, workbench, or roof causing damage to the compressor and could result in serious injury or death to the operator.	Always operate compressor in a stable secure position to prevent accidental movement of the unit. Never operate compressor on a roof or other elevated position. Use additional air hose to reach high locations.

WARNING: RISK OF SERIOUS INJURY OR PROPERTY DAMAGE WHEN TRANSPORTING COMPRESSOR



(Fire, Inhalation, Damage to Vehicle Surfaces)

WHAT CAN HAPPEN	HOW TO PREVENT IT	
Oil can leak or spill and could result in fire or breathing hazard; serious injury or death can result. oil leaks will damage carpet, paint or other surfaces in vehicles or trailers.	Always place COMPRESSOR on a protective mat when transporting to protect against damage to vehicle from leaks. Remove COMPRESSOR from vehicle immediately upon arrival at your destination.	

HAZARD

WARNING: RISK OF UNSAFE OPERATION



WHAT CAN HAPPEN	HOW TO PREVENT IT	
Unsafe operation of your air compressor could lead to serious injury or death to you or others.	 Review and understand all instructions and warnings in this manual. Become familiar with the operation and controls of the air compressor. Keep operating area clear of all persons, pets, and obstacles. Keep children away from the air compressor at all times. Do not operate the product when fatigued or under the influence of alcohol or drugs. Stay alert at all times. Never defeat the safety features of this product. Equip area of operation with a fire extinguisher. Do not operate machine with missing, broken, or unauthorized parts. 	

GLOSSARY

Become familiar with these terms before operating the unit.

CFM: Cubic feet per minute.

SCFM: Standard cubic feet per minute; a unit of measure of air delivery. **PSIG:** Pounds per square inch gauge; a unit of measure of pressure.

Code Certification: Products that bear one or more of the following marks: UL, CUL, ETL, CETL, have been evaluated by OSHA certified independent safety laboratories and meet the applicable Underwriters Laboratories Standards for Safety.

Cut-In Pressure: While the motor is off, air tank pressure drops as you continue to use your accessory. When the tank pressure drops to a certain low level the motor will restart automatically. The low pressure at which the motor automatically restarts is called "cut-in" pressure.

Cut-Out Pressure: When an air compressor is turned on and begins to run, air pressure in the air tank begins to build. It builds to a certain high pressure before the motor automatically shuts off - protecting your air tank from pressure higher than its capacity. The high pressure at which the motor shuts off is called "cut-out" pressure.

Branch Circuit: Circuit carrying electricity from electrical panel to outlet. **To Lock Out Power:** Place a lock on the line power switch so no one else can turn on the power.

DUTY CYCLE

Air compressors should be operated on not more than a 50% duty cycle. This means an air compressor that pumps air more than 50% of one hour is considered misuse, because the air compressor is undersized for the required air demand. Maximum compressor pumping time per hour is 30 minutes.

SPECIFICATIONS

Model No.	66-750
Horsepower Peak	6.5
Bore	2.875"
Stroke	2"
Voltage-Single Phase	240
Minimum Branch Circuit Requirement	15 amps
*Fuse Type	"Time Delay"
Air Tank Capacity - Gallons	60
Approximate Cut-in Pressure	110
Approximate Cut-out Pressure	135
SCFM @ 40 PSIG	11.9
SCFM @ 90 PSIG	9.4

* A circuit breaker is preferred. Use only a fuse or circuit breaker that is the same rating as the branch circuit on which the air compressor is operated. If compressor is connected to a circuit protected by fuses, use only time delay fuses. Time delay fuses should be marked "D" in Canada and "T" in the US.

ACCESSORIES

Accessories for this unit are available at the store the unit was purchased.

ASSEMBLY

Tools Required for Assembly

- 1 9/16" socket or open end wrench
- 1 electric drill

Unpacking

Remove all packaging. 1.

It may be necessary to brace or support one side of the outfit when removing the pallet because the air compressor will have a tendency to tip.

- 2. Remove and discard the (4) screws and washers holding the compressor to the pallet.
- 3. With the help of another person carefully remove air compressor from pallet and place on a level surface.

To Add Oil To Pump

Compressors are shipped without oil. A small amount of oil may be present in the pump upon receipt of the air compressor. This is due to plant testing and does not mean the pump contains oil. Do not attempt to operate this air compressor without first adding oil to the crankcase. Serious damage can result from even limited operation unless filled with oil and broken in correctly. Make sure to closely follow initial start-up procedures.

Multi-Viscosity motor oils, like 10W 30, should not be **ACAUTION** used in an air compressor. They leave carbon deposits on critical components, thus reducing performance and compressor life. Use air compressor oil only.

NOTE: Oil is included with some units. If oil is not included, use an oil specifically formulated for use in an air compressor, such as Porter-Cable PAS1 air compressor oil. Oil may be found at the store where the air compressor was purchased.

Place unit on a level surface. 1.

WARNING

Drain tank to release air pressure before removing the oil fill cap or oil drain plug.

- 2. Remove oil fill plug (A) and slowly add compressor oil until it is even with the top of the oil fill hole. NOTE: Do not allow oil to be lower than 3/8" (6 threads) from the top at any time. When filling the crankcase, the oil flows very slowly into the pump. If the oil is added too quickly, it will overflow and appear to be full. **NOTE:** Crankcase oil capacity is approximately 16 fluid ounces.

3. Replace oil fill plug.

INSTALLATION

HOW TO SET UP YOUR UNIT

Location of the Air Compressor

- Locate the air compressor in a clean, dry, and well ventilated area.
- Locate the air compressor at least 12" away from the wall or other obstructions that will interfere with the flow of air.
- Locate the air compressor as close to the main power supply as possible to avoid using long lengths of electrical wiring. **NOTE:** Long lengths of electrical wiring could cause power loss to the motor.
- The air filter must be kept clear of obstructions which could reduce air flow to the air compressor.

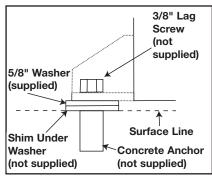
Anchoring of the Air Compressor

A WARNING Excessive Vibration can weaken the air tank and cause an explosion. The compressor must be properly mounted.

The air compressor MUST be bolted to a solid, level surface.

Hardware needed:

- 4 Concrete anchors (not supplied)
- 4 3/8" Lag screw to fit concrete anchors (not supplied)
- 4 5/8" Washer (found in parts bag)shims (if needed)
- 1. Place the air compressor on on a solid, level surface.
- 2. Mark the surface using the holes in the air compressor feet as a template.
- 3. Drill holes in the surface for the concrete anchors. Install concrete anchors.
- 4. Line-up holes in surface with holes in air compressor feet.
- Place the (4) washers (supplied) between the floor and air compressor feet. If needed, solid shims may be placed between the washers and floor to evenly distribute weight on all four feet. See next figure.
- Place the (4) 3/8" lag screws through the air compressor feet, washers, shims, and into the anchors.



7. Torque 3/8" lag screws to 7-10 ft.-lbs.

Wiring Instructions

ADANGER RISK OF ELECTRICAL SHOCK. Improper electrical grounding can result in electrical shock. <u>The wiring</u> should be done by a qualified electrician to comply with national and local electrical codes.

A qualified electrician needs to knows the following before wiring:

- 1. The amperage rating of the electrical box should be adequate. Refer to the product specifications, found in the front of this manual, for this information.
- 2. The supply line should have the same electrical characteristics (voltage, cycle, phase) as the motor. Refer to the motor nameplate, on side of motor, for this information.

NOTE: The wiring must be the same as the motor nameplate voltage plus or minus 10%. Refer to local codes for recommended wire sizes, correct wire size, and maximum wire run; undersize wire causes high amp draw and overheating to the motor.

ACAUTION Electrical wiring must be located away from hot surfaces such as manifold assembly, compressor outlet tubes,

heads, or cylinders.

GROUNDING INSTRUCTIONS

This product should be connected to a metallic, permanent wiring system, of an equipment-grounding terminal or lead on the product.

Voltage and Circuit Protection

Refer to the Parts Manual for the voltage and minimum branch circuit requirements.

Certain air compressors can be operated on a 15 amp circuit if the following conditions are met.

- 1. Voltage supply through branch circuit is 15 amps.
- 2. Circuit is not used to supply any other electrical needs (lights, appliances, etc.).
- Circuit is equipped with a 15 amp circuit breaker or 15 amp time delay fuse. NOTE: If compressor is connected to a circuit protected by fuses, use only time delay fuses. Time delay fuses should be marked "D" in Canada and "T" in the US.

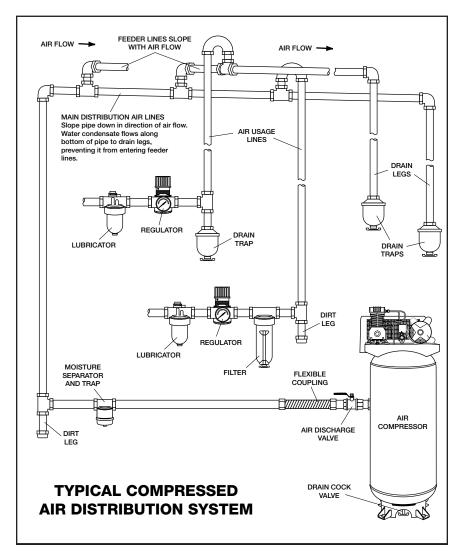
If any of the above conditions cannot be met, or if operation of the compressor repeatedly causes interruption of the power, it may be necessary to operate it from a 20 amp circuit.

Air Distribution System

AWARNING Plastic or PVC pipe is not designed for use with compressed air. Regardless of its indicated pressure rating, plastic pipe can burst from air pressure. Use only metal pipe for air distribution lines.

The next figure represents a typical air distribution system. The following are tips to remember when setting up the air compressor's air distribution system.

- Use pipe that is the same size as the air tank outlet. Piping that is too small will restrict the flow of air.
- If piping is over 100 feet long, use the next larger size.
- Bury underground lines below the frost line and avoid pockets where condensation can gather and freeze. Apply pressure before underground lines are covered to make sure all pipe joints are free of leaks.
- A flexible coupling is recommended to be installed between the air discharge outlet and main air distribution line to allow for vibration.
- A separate regulator is recommended to control the air pressure. Air pressure from the tank is usually to high for individual air driven tools.



OPERATION

Know Your Air Compressor

READ THIS OWNER'S MANUAL AND SAFETY RULES BEFORE OPERATING YOUR UNIT. Compare the illustrations with your unit to familiarize yourself with the location of various controls and adjustments. Save this manual for future reference.

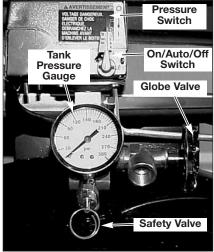
Description of Operation

Become familiar with these controls before operating the unit.

On/Auto/Off Switch: Turn this switch ON to provide automatic power to the pressure switch and OFF to remove power at the end of each use.

Pressure Switch: The pressure switch automatically starts the motor when the air tank pressure drops below the factory set "cut-in" pressure. It stops the motor when the air tank pressure reaches the factory set "cut-out" pressure.

Safety Valve: If the pressure switch does not shut off the air compressor at its "cut-out" pressure setting, the safety valve will protect against high pressure by "popping out" at its factory set pressure (slightly higher than the pressure switch "cut-out" setting).

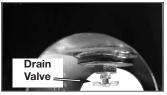


Tank Pressure Gauge: The tank pressure gauge indicates the reserve air pressure in the tank.

Globe Valve: Opens and closes air discharge valve. Turn knob counterclockwise to open and clockwise to close.

Drain Valve: The drain valve is located at the base of the air tank and is used to drain condensation at the end of each use.

Cooling System (not shown): This compressor contains an advanced design cooling system. At the heart of this cooling system is an engineered

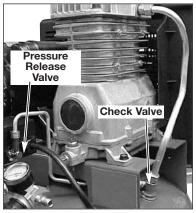


fan. It is perfectly normal for this fan to blow air through the vent holes in large amounts. You know that the cooling system is working when air is being expelled.

Air Compressor Pump (not shown): Compresses air into the air tank. Working air is not available until the compressor has raised the air tank pressure above that required at the air outlet. **Check Valve:** When the air compressor is operating, the check valve is "open", allowing compressed air to enter the air tank. When the air compressor reaches "cut-out" pressure, the check valve "closes", allowing air pressure to remain inside the air tank.

Pressure Release Valve: The pressure release valve, located on the side of the pressure switch, is designed to automatically release compressed air from the compressor head and the outlet tube when the air compressor reaches "cut-out" pressure or is shut off. The pressure release valve allows the motor to restart freely. When the motor stops running, air will be heard escaping from this valve for a few seconds. No air should be heard leaking when the motor is running, or continuous leaking after unit reaches "cut-out" pressure.

Air Intake Filter (not shown) This filter is



designed to clean air coming into the pump. This filter must always be clean and ventilation openings free from obstructions. See "Maintenance".

Motor Overload Protector: This motor has a manual thermal overload protector. If the motor overheats for any reason, the overload protector will shut off the motor. The motor must be allowed to cool down before restarting. To restart:

- 1. Place the On/Auto/Off lever in the Off postion.
- 2. Allow the motor to cool.
- 3. Depress the red reset button on the motor.
- 4. Place the On/Auto/Off lever in the On/Auto postion to restart the motor.



How to Use Your Unit

How to Stop:

1. Set the On/Auto/Off lever to "OFF".

Before Starting

Break-in Procedure

Serious damage may result if the following break-in instructions are not closely followed.

This procedure is required **before** the air compressor is put into service and when the check valve or a complete compressor pump has been replaced.

1. Make sure the On/Auto/Off lever is in the "OFF" position.

- 2. Recheck all wiring. Make sure wires are secure at all terminals connections. Make sure all contacts move freely and are not obstructed.
- 3. Open the globe valve fully to permit air to escape and prevent air pressure build up in the air tank during the break-in period.
- 4. Move the On/Auto/Off lever to "ON/AUTO" position. The compressor will start.
- 5. Run the compressor for 20 minutes. Make sure the globe valve is open and there is minimal air pressure build-up in tank.
- Check all air line fittings and connections/piping for air leaks by applying a soap solution. Correct if necessary. **NOTE:** Minor leaks can cause the air compressor to overwork, resulting in premature breakdown or inadequate performance.
- 7. Check for excessive vibration. Readjust or shim air compressor feet, if necessary.
- 8. After 20 minutes, close the globe valve. The air receiver will fill to "cut-out" pressure and the motor will stop.

Before Each Start-Up:

- 1. Place On/Auto/Off lever to "OFF".
- 2. Close the globe valve.
- 3. Attach hose and accessories. **NOTE:** A regulator MUST be installed when using accessories rated at less than 110 PSI.

AWARNING Too much air pressure causes a hazardous risk of bursting. Check the manufacturer's maximum pressure rating for air tools and accessories. The regulator outlet pressure must never exceed the maximum pressure rating.

How to Start

- 1. Turn the On/Auto/Off lever to "AUTO" and allow tank pressure to build. Motor will stop when tank pressure reaches "cut-out" pressure.
- 2. When the tank pressure reaches "cut-out" pressure open the globe valve.

IMPORTANT: When using regulator and other accessories refer to the manufacturers instructions.

NOTE: Always operate the air compressor in well-ventilated areas free of gasoline or other combustible vapors. If the compressor is being used to operate a sprayer, DO NOT place compressor near the spray area.

MAINTENANCE

Customer Responsibilities

	Before each use	Daily or after each use	Every 8 hours	Every 40 hours	Every 100 hours	Every 160 hours	Yearly
Check Safety Valve							
Drain Tank							
Oil Leaks							
Check Oil							
Change Oil							
Unusual Noise and/or Vibration							
Air Filter				•1			
Drive Belt -Condition							
Motor Pulley/Flywheel alignment							
Air compressor pump intake and exhaust valves							•
Inspect air lines and fittings for leaks	•						
1- more frequent in dusty or humid conditions							

ACAUTION Unit cycles automatically when power is on. When performing maintenance, you may be exposed to voltage sources, compressed air, or moving parts. Personal injuries can occur. Before performing any maintenance or repair, disconnect power source from the compressor and bleed off all air pressure.

To ensure efficient operation and longer life of the air compressor outfit, a routine maintenance schedule should be prepared and followed. The following routine maintenance schedule is geared to an outfit in a normal working environment operating on a daily basis. If necessary, the schedule should be modified to suit the conditions under which your compressor is used. The modifications will depend upon the hours of operation and the working environment. Compressor outfits in an extremely dirty and/or hostile environment will require a greater frequency of all maintenance checks.

NOTE: See "Operation" section for the location of controls.

To Check Safety Valve

AWARNING

If the safety valve does not work properly, overpressurization may occur, causing air tank rupture or an

explosion.

1. Before starting compressor, pull the ring on the safety valve to make sure that the safety valve operates freely. If the valve is stuck or does not operate smoothly, it must be replaced with the same type of valve.

To Drain Tank

- 1. Set the On/Auto/Off lever to "OFF".
- 2. Close the globe valve.
- 3. Remove the air tool or accessory.
- 4. Open the globe valve and allow the air to slowly bleed from the air tank until tank pressure is approximately 20 psi.
- 5. Close the globe valve.
- 6. Drain water from air tank by opening drain valve (counter-clockwise) on bottom of tank.

Water will condense in the air tank. If not drained, water will corrode and weaken the air tank causing a risk of air

tank rupture.

7. After the water has been drained, close the drain valve (clockwise). The air compressor can now be stored.

NOTE: If drain valve is plugged, release all air pressure. The valve can then be removed, cleaned, and reinstalled.

Oil

AWARNING Drain tank to release air pressure before removing the oil fill cap or oil drain plug.

Checking

- 1. Remove the oil fill plug (A). The oil level should be even with the top of the fill hole and no lower than 6 threads from the top of fill hole.
- 2. If needed, slowly add oil until it reaches the top of fill hole.

NOTE: Oil is included with some units. If oil is not included, use an oil specifically formulated for use in an air compressor, such as Porter-Cable PAS1 air compressor oil. Oil may be found at the store where the air compressor was purchased.

Changing

- 1. Remove the oil fill plug (A).
- 2. Remove the oil drain plug (B) and drain oil into a suitable container.
- 3. Replace the oil drain plug (B) and tighten securely.
- Slowly fill crankcase to the top of the fill hole. NOTE: Crankcase oil capacity is approximately 16 fluid ouncs (473.2 ml)

A

Overfilling with oil will cause premature compressor failure. Do not overfill.

5. Replace oil fill plug (A) and tighten securely.

Air Filter - Inspection and Replacement

AWARNING

Hot surfaces. Risk of burn. Compressor heads are exposed when filter cover is removed. Allow compressor

to cool prior to servicing.

Keep the air filter clean at all times. Do not operate the air compressor with the air filter removed.

A dirty air filter will not allow the compressor pump to operate at full capacity. Before using the compressor pump, check the air filter to make sure it is clean and in place.

If it is dirty, replace it with a new filter.

- 1. Using a pair of needle nose pliers or a screwdriver pull or pry out the old filter and carefully clean the filter area.
- 2. Push the new air filter in place. Refer to the "Repair Parts" for the correct part number.

IMPORTANT: Do not operate the compressor with the air filter removed.

- 3. Place new air filter into filter cover. Refer to the "Repair Parts" for the correct part number.
- 4. Replace air filter cover and lock into place.

Motor Pulley/Flywheel Alignment

NOTE: Once the motor pulley has been moved from its factory set location, the grooves of the flywheel and pulley must be aligned to within 1/16" to prevent excessive belt wear.

The air compressor flywheel and motor pulley must be in-line (in the same plane) within 1/16" to assure belt retention within flywheel belt grooves. To check alignment, perform the following steps:

- 1. Unplug air compressor from power source.
- 2. Remove belt guard
- Place a straightedge against the outside of the flywheel and the motor drive pulley.
- Measure the distance between the edge of the belt and the straightedge at points A1 and A2 in

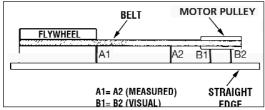


figure. The difference between measurements should be no more than 1/16".

- 5. If the difference is greater or less than 1/16" loosen the set screw holding the motor drive pulley to the shaft and adjust the pulley's position on the shaft until the A1 and A2 measurements are within 1/16" of each other.
- 6. Tighten the motor drive pulley set screw to 70-80 in.-lbs.

- 7. Visually inspect the motor drive pulley to verify that it is perpendicular to the drive motor shaft. Points B1 and B2 of Figure should appear to be equal. If they are not, loosen the set screw of the motor drive pulley and equalize B1 and B2, using care not to disturb the belt alignment performed in step 2.
- 8. Retighten the motor drive pulley set screw to 70-80 in.-lbs.
- 9. Reinstall belt guard.

Air Compressor Pump Intake and Exhaust Valves

Once a year have a Trained Service Technician check the air compressor pump intake and exhaust valves.

Inspect Air Lines and Fittings for Leaks

- 1. Turn the air compressor on to inspect for air leaks.
- 2. Apply a soap solution to all air line fittings and connections/piping.
- 3. Correct any leaks found.

IMPORTANT: Even minor leaks can cause the air compressor to overwork, resulting in premature breakdown or inadequate performance.

SERVICE AND ADJUSTMENTS

AWARNING Unit cycles automatically when power is on. When doing Maintenance, you may be exposed to voltage sources, compressed air or moving parts. Personal injuries can occur. Before performing any Maintenance or repair, unplug the compressor and bleed off all air pressure.

ALL MAINTENANCE AND REPAIR OPERATIONS NOT LISTED MUST BE PERFORMED BY TRAINED SERVICE TECHNICIAN.

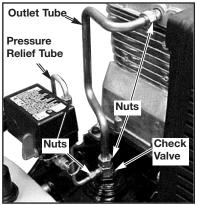
AWARNING

Before servicing:

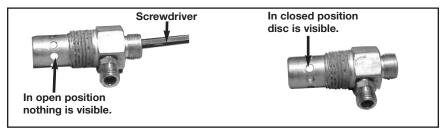
- Unplug or disconnect electrical supply to the air compressor.
- Bleed tank of pressure.
- Allow the air compressor to cool.

To Replace or Clean Check Valve

- 1. Release all air pressure from air tank. See "To Drain Tank" in the Maintenance section.
- 2. Unplug unit.
- Using an adjustable wrench loosen outlet tube nut at air tank and pump. Carefully move outlet tube away from check valve.
- 4. Using an adjustable wrench loosen pressure relief tube nut at air tank and pressure switch. Carefully move pressure relief tube away from check valve.
- Unscrew the check valve (turn counterclockwise) using a 7/8" open end wrench. Note the orientation for reassembly.



6. Using a screwdriver, carefully push the valve disc up and down. **NOTE:** The valve disc should move freely up and down on a spring which holds the valve disc in the closed position, if not the check valve needs to be cleaned or replaced.



- 7. Clean or replace the check valve. A solvent, such as paint or varnish remover can be used to clean the check valve.
- 8. Apply sealant to the check valve threads. Reinstall the check valve (turn clockwise).
- 9. Replace the pressure release tube. Tighten nuts.
- 10. Replace the outlet tube and tighten nuts.
- 11. Perform the Break-in Procedure. See "Break-in Procedure" in the Operation section.

To Replace Belt

AWARNING Serious injury or damage may occur if parts of the body or loose items get caught in moving parts. Never operate the unit with the belt guard removed. The belt guard should be removed only when the compresor is unplugged.

- 1. Place the ON/AUTO-OFF lever in the OFF position.
- 2. Unplug compressor.
- 3. Remove the front of the belt guard by disengaging the snaps. Insert a flat bladed screwdriver at each snap location and pry the beltguard apart.
- Loosen the wing nut on hold down plate and tilt motor to allow for easy removal or installation of the belt.
- 5. Remove belt.
- Replace belt. NOTE: The belt must be centered over the grooves on the flywheel and motor pulley.
- 7. Turn the wing nut on the hold down plate until it makes contact with the washer, plus one additional turn.
- 8. Replace the belt guard.

Wing Nut

STORAGE

Before you store the air compressor, make sure you do the following:

- 1. Review the "Maintenance" section on the preceding pages and perform scheduled maintenance as necessary.
- 2. Set the On/Auto/Off lever to "OFF".
- 3. Close the globe valve.
- 4. Remove the air tool or accessory.
- 5. Open the globe valve and allow the air to slowly bleed from the air tank until tank pressure is approximately 20 psi.
- 6. Drain water from air tank by opening drain valve (counter-clockwise) on bottom of tank.

AWARNING Water will condense in the air tank. If not drained, water will corrode and weaken the air tank causing a risk of air tank rupture.

7. After the water has been drained, close the drain or drain valve.

NOTE: If drain valve is plugged, release all air pressure. The valve can then be removed, cleaned, then reinstalled.

8. Protect the air hose from damage (such as being stepped on or run over).

TROUBLESHOOTING

AWARNING Performing repairs may expose voltage sources, moving parts or compressed air sources, moving parts or compressed air sources. Personal injury may occur. Prior to attempting any repairs, unplug the air compressor and bleed off all air tank air pressure.

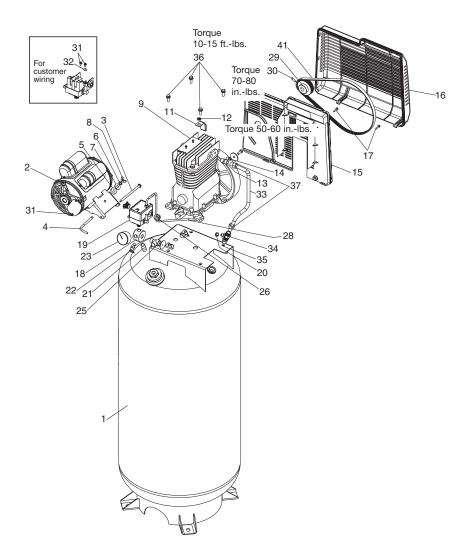
PROBLEM		CORRECTION
Excessive tank pressure - safety valve pops off.	Pressure switch does not shut off motor when compressor reaches "cut- out" pressure. Pressure switch "cut-out" too high.	Move On/Auto/Off lever to the "OFF" position, if the outfit does not shut off contact a Trained Service Technician. Contact a Trained Service Technician.
Air leaks at fittings.	Tube fittings are not tight enough.	Tighten fittings where air can be heard escaping. Check fittings with soapy water solution. DO NOT OVERTIGHTEN.
Air leaks at or inside check valve	Check valve seat damaged.	A defective check valve results in a constant air leak at the pressure release valve when there is pressure in the tank and the compressor is shut off. Replace check valve. Refer the "To Replace or Clean Check Valve" in the "Operation" section.
Air leaks at pressure switch release valve. (if equipped)	Defective pressure switch release valve.	Contact a Trained Service Technician.
Air leaks in air tank or at air tank welds.	Defective air tank.	Air tank must be replaced. Do not repair the leak. AWARNING Weld or otherwise modify air tank or it will weaken. The tank can rupture or explode.
Air leaks between head and valve plate.	Leaking seal.	Contact a Trained Service Technician.

PROBLEM	CAUSE	CORRECTION
Pressure reading on the regulated pressure gauge (if equipped) drops when an accessory is used.	It is normal for "some" pressure drop to occur.	If there is an excessive amount of pressure drop when the accessory is used, adjust the regulator as instructed in the Operation section. NOTE: Adjust the regulated pressure under flow conditions (while accesory is being used).
Air leak from safety valve.	Possible defect in safety valve.	Operate safety valve manually by pulling on ring. If valve still leaks, it should be replaced.
Compressor is not supplying enough air to operate accessories.	Prolonged excessive use of air. Compressor is not large enough for air requirement. Hole in hose. Check valve restricted. Air leaks. Restricted air intake filter. Loose belt.	Decrease amount of air usage. Check the accessory air requirement. If it is higher than the SCFM or pressure supplied by your air compressor, you need a larger compressor. Check and replace if required. Remove and clean, or replace. Tighten fittings. Clean or replace air intake filter. Do not operate the air compressor with the filter removed. Refer to the "Air Filter" paragraph in the "Maintenance " section. Check belt tension, see Adjusting Belt Tension in the Maintenance section.
Restricted air intake	Dirty air filter.	Clean or replace. See Air Filter paragraph in the Maintenance section.

PROBLEM	CAUSE	CORRECTION	
Motor will not run.	Motor overload protection switch has tripped.	The motor must be allowed to cool down before restarting. To restart, see Motor Overload Protector paragraph in the Operation section.	
	Tank pressure exceeds pressure switch "cut-in" pressure.	Motor will start automatically when tank pressure drops below "cut-in" pressure of pressure switch.	
	Check valve stuck open.	Remove and clean, or replace.	
	Loose electrical connections.	Check wiring connection inside pressure switch and terminal box area.	
	Possible defective motor or starting capacitor.	Have checked by a Trained Service Technician.	
	Paint spray on internal motor parts.	Have checked by a Trained Service Technician. Do not operate the compressor in the paint spray area. See flammable vapor warning.	
	Pressure release valve on pressure switch has not unloaded head pressure.	Bleed the line by pushing the lever on the pressure switch to the "OFF" position; if the valve does not open, replace switch.	
	Fuse blown, circuit breaker tripped.	 Check fuse box for blown fuse and replace as necessary. Reset circuit breaker. Do not use a fuse or circuit breaker with higher rating than that specified for your particular branch circuit. Check for proper fuse. You should use a time delay fuse. Check for low voltage conditions and/or proper extension cord. Disconnect the other electrical appliances from circuit or operate the compressor on its own branch circuit. 	

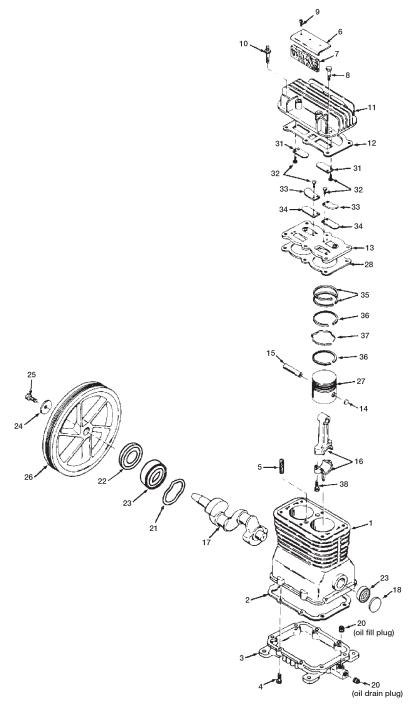
PROBLEM	CAUSE	CORRECTION
Knocking Noise.	Possible defect in safety valve.	Operate safety valve manually by pulling on ring. If valve still leaks, it should be replaced.
	Defective check valve.	Remove and clean, or replace.
	Loose pulley.	Tighten pulley set screw, 145-165 inlbs.
	Loose flywheel.	Tighten flywheel screw, 33-37 ftlbs.
	Compressor mounting screws loose.	Tighten mounting screws, 20-25 ftlbs.
	Loose belt.	Check belt tension, see Adjusting Belt Tension in the Maintenance section.
	Carbon build-up in pump.	Have checked by a Trained Service Technician.
	Belt to tight.	Check belt tension, see Adjusting Belt Tension in the Maintenance section.
Excessive belt wear	Loose belt.	Check belt tension, see Adjusting Belt Tension in the Maintenance section.
	Tight belt.	Check belt tension, see Adjusting Belt Tension in the Maintenance section.
	Loose pulley.	Have checked by a Trained Service Technician.
	Pulley misalignment.	See Motor Pulley/Flywheel Alignment paragraph in the Maintenace section.
Squealing sound.	Compressor pump has no oil.	See Oil-Checking paragraph in the Maintenace section.
	Loose belt.	Check belt tension, see Adjusting Belt Tension in the Maintenance section.

AIR COMPRESSOR DIAGRAM



PARTS LIST

KEY		
NO.	PART NO.	DESCRIPTION
1	Z-D26273	Tank
2	Z-D20659	Motor - O/L Ballerina
3	D21594	Motor Mount Pin
4	D23591	Hold Down Screw
5	CAC-1011	Spring Elastomer
6	SSN-1619-ZN	Lock Washer
7	SSN-56-ZN	Washer 1 x 11/32 x 1/16
8	SS-2038-ZN	Nut Wing 5/16-18
9	Z-D22629	Pump Assembly
11	CAC-327	Bracket
12	SSF-8113-ZN	Lock Nut 3/8-16 x 9/16
13	SSP-9401	Connector Body
14	SS-1215	Pipe Plug
15	CAC-323	Beltguard, Inside
16	CAC-322	Beltguard, Outside
17	SSF-986	Screw #10-16 x 7/16 (2 used)
18	AC-0217	Manifold
19	Z-D22260	Pressure Switch
20	SSP-7811	Nut Sleeve Assembly 1/4"
21	SS-2072-1	Nipple .375 NPT x 1.50
22	97503734	Safety Valve
23	GA-360	Gauge 300 PSI
25	SSV-812	Globe Valve 200 PSI
26	SSW-7367	Strain Relief Bushing
27	SUDL-402-2	Motor Cord Assembly (Not Shown)
28	D21583	Pressure Relief Tube
29	C-PU-2861	Motor Pulley
30	SS-391	Set Screw
31	SUDL-9-1	Screw (3 used)
32	SSN-613	Washer Belleville
33	D21581	Outlet Tube
34	CAC-4337-1	Check Valve
35	SS-8553	Connector Body
36	SSF-928	Screw 5/16-18 x 7/8 Hex (4 used)
37	SSP-7812	Nut Sleeve Assembly 1/2" (2 used)
41	C-BT-223	Belt
42	SS-2707	Drain Valve (Not Shown)
43	D20328	Air Compressor Oil (not shown)



PARTS LIST

KEY		
NO.	PART NO.	DESCRIPTION
1	Z-AC-0205	Crankcase
* 2	265-16-1	Base Gasket
3	DAC-276	Base
4	SSF-925	Screw 1/4-20 x 7/8 (8 used) (Torque 9 to 12 ftlbs.)
* 5	265-6	Vent Filter (2 used)
6	265-18	Filter Plate
* 7	265-17	Felt Filter
8	SSF-955	Screw (5 used) (Torque 25 to 30 ftlbs.)
9	SSF-935	Screw (2 used)
10	SSF-6627	Shoulder Stud 3/8-16 (Torque 25 to 30 ftlbs.)
11	Z-CAC-4213	Assembly Head
* 12	Z-CAC-291-1	Gasket Head
13	Z-CAC-4212-1	Valve Plate Assembly
14	CAC-207	Piston Pin Plug (4 used)
15	265-19	Piston Pin (2 used)
16	265-410	Connecting Rod Assembly (2 used)
17	Z-D22270	Crankshaft
* 18 20	SSP-505 SSP-486	Plug
20 21	SSN-1018	Pipe Plug 3/8 - 18 NPT (2 used) Washer Wavy Spring
* 22	AC-0169	Oil Seal
22	SST-104	Ball Bearing (2 used)
24	SSN-1014-ZN	Washer .339/.344 ID 1-1/2
25	SSF-3039-ZN	Screw 5/16-18 x 3/4 (Torque 15 to 20 ftlbs.)
26	265-2	Flywheel
27	CAC-4285	Piston Ring Assembly (2 used)
* 28	Z-CAC-54-2	Valve Plate Gasket
• 31	265-25	Intake Flapper Valve (2 used)
• 32	SSF-9821	Screw THD Forming #5-40 x 1/4 (8 used)
		(Torque 13 to 17 inIbs.)
33	CAC-294	Restrictor Plate (2 used)
• 34	Z-265-196-1	Flapper Valve-Corner Bevels (2 used)
+ 35	Z-CAC-56-1	Compression Ring (4 used)
+ 36	Z-CAC-58	Oil Ring (4 used)
+ 37	Z-CAC-57	Oil Ring Expander (2 used)
38	SSF-927	Screw 1/4-20x1-1/8 (2 used) (Torque 9 to 13 ftlbs.)

Kits / Juegos

+	KK-4313	Ring Kit
*	K-0159	Gasket Kit
	KK-4275	Valve Kit
	69D109740	Pressure Release Valve and Nut (not shown)

LIMITED WARRANTY

DELTA CORPORATION warrants to the original purchaser that all products covered under this warranty are free from defects in material and workmanship. Products covered under this warranty include air compressors, air tools, service parts, pressure washers, and generators, which have the following warranty periods:

- 3 YEARS Limited warranty on 2-stage oil-free air compressor pumps that operate at 1725 RPM.
- 2 YEARS Limited warranty on oil-lubricated air compressor pumps.
- 1 YEAR Limited warranty on all other air compressor components.
- 2 YEARS Limited warranty on electric generator alternators.
- **1 YEAR** Limited warranty on other generator components.
- 2 YEARS Limited warranty on pneumatic air tools as described in Delta general catalog.
- **1 YEAR** Limited warranty on pressure washers used in consumer applications (i.e. personal residential household usage only).
- 90 DAY Pressure washers used for commercial applications (income producing) and service parts.

Delta will repair or replace, at Delta's option, products or components which have failed within the warranty period. Service will be scheduled according to the normal work flow and business hours at the service center location, and the availability of replacement parts. All decisions of Delta Corporation with regard to this limited warranty shall be final.

This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

RESPONSIBILITY OF ORIGINAL PURCHASER (initial User):

- To process a warranty claim on this product, DO NOT return it to the retailer. The product must be evaluated by an **Delta** Authorized Warranty Service Center. For the location of the nearest Authorized Warranty Service Center call 1-866-422-4286, 24 hours a day, 7 days a week.
- · Retain original cash register sales receipt as proof of purchase for warranty work.
- Use reasonable care in the operation and maintenance of the product as described in the Owners Manual(s).
- Deliver or ship the product to the nearest Authorized Warranty Service Center. Freight costs, if any, must be paid by the purchaser.
- Air compressors with 60 and 80 gallon tanks will be inspected at the site of installation. Contact the nearest Authorized Warranty Service Center that provides on-site service calls, for service call arrangements.
- If the purchaser does not receive satisfactory results from the Authorized Warranty Service Center, the purchaser should contact.

THIS WARRANTY DOES NOT COVER:

- · Merchandise sold as reconditioned, used as rental equipment, and floor or display models.
- Merchandise that has become damaged or inoperative because of ordinary wear, misuse*, cold, heat, rain, excessive humidity, freeze damage, use of improper chemicals, negligence, accident, failure to operate the product in accordance with the instructions provided in the Owners Manual(s) supplied with the product, improper maintenance, the use of accessories or attachments not recommended by, or unauthorized repair or alterations.

* An air compressor that pumps air more than 50% during a one hour period is considered misuse because the air compressor is undersized for the required air demand.

- Repair and transportation costs of merchandise determined not to be defective.
- · Costs associated with assembly, required oil, adjustments or other installation and start-up costs.
- Expendable parts or accessories supplied with the product which are expected to become inoperative or unuseable after a reasonable period of use, including but not limited to sanding disks or pads, saw and shear blades, grinding stones, springs, chisels, nozzles, o-rings, air jets, washers and similar accessories.
- Merchandise sold by which has been manufactured by and identified as the product of another company, such as gasoline engines. The product manufacturer's warranty, if any, will apply.
- ANY INCIDENTAL, INDIRECT OR CONSEQUENTIAL LOSS, DAMAGE, OR EXPENSE THAT MAY RESULT FROM ANY DEFECT, FAILURE OR MALFUNCTION OF THE PRODUCT IS NOT COVERED BY THIS WARRANTY. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you.
- IMPLIED WARRANTIES, INCLUDING THOSE OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, ARE LIMITED TO ONE YEAR FROM THE DATE OF ORIGINAL PURCHASE. Some states do not allow limitations on how long an implied warranty lasts, so the above limitations may not apply to you.



Jackson, TN USA 1-866-422-4286